

Date: Monday, 4/21/2008 9:13:35 AM
 User: Chantal Lavoie

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SADDLE BILLET
Job Number :	38696		
Estimate Number :	10036		
P.O. Number :		Part Number :	D6101013
This Issue :	4/21/2008	Drawing Number :	D6101 REV A
Prsht Rev. :	NC	Project Number :	N/A
First Issue :	/ /	Drawing Revision :	A
Previous Run :	31390	Material :	
Written By :	<u> </u>	Due Date :	4/30/2008
Checked & Approved By :	<u> </u>	Qty:	40 Um: Each
Comment :	Est. A: 01.05.04 New Issue EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

PG

PURCHASING

**Comment:** PURCHASINGIssue P/O: 6184

a) Description: Alluminum billet

b) 10.100" x 8.250" x 2.50" thick (+0.030 / -0.000)

c) Tolerance on all dimensions are +0.030/-0.000"

d) Grain direction along 10.100" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

C208104/21

(70)

2.0

D6101013P

Saddle billet



Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s)
 Saddle billet

3.0

PACKAGING 1

PACKAGING RESOURCE #1

**Comment:** PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

 (40)

4.0

QC6

DIMENSIONAL CHECK

**Comment:** DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

 (40)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 4/21/2008 9:13:35 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 38696

Part Number: D6101013

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: CNC

28 08/05/14

6.0

QC21

FINAL INSPECTION/W/O RELEASE



08/05/15

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



u 08/05/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

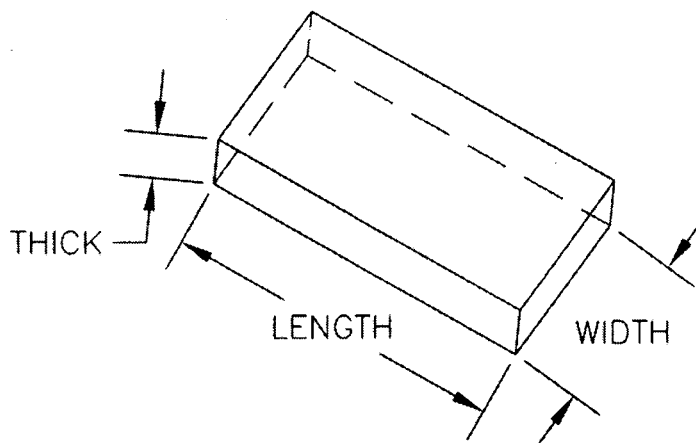
NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>JS</i>	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23 *CP*



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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C208/04/21
W/O. 38696

SHIP TO:

A M CASTLE & CO
3050 SOUTH HYDRAULIC
WICHITA, KS 67216

SOLD TO:

AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4119118

1Ac 6879

CUSTOMER PO NUMBER: 23-13568		WORK PACKAGE:		CUSTOMER PART NUMBER: 6879 A97075-60		SHIP RUN/LOAD ID: 101194/2		GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1060498	LINE ITEM: 1	SHIP DATE: 18-JAN-2008	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE			
WEIGHT SHIPPED: 5436 LB	QUANTITY: 3 PCS EST.	B/L NUMBER: 2016119	GAUGE: 2.5000 IN		WIDTH: 48.500 IN	LENGTH: 144.500 IN			

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev06
BSS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 410016A0 Cast 146

Drop 58

Ingot 4

(ASTM E8/B557)

Tensile: Temper
T7351

Dir / # Tests
LT / 2 (Min:Max)

Ultimate KSI (MPA)
70.3 : 72.0
(485 : 496)

Yield KSI (MPA)
59.3 : 61.5
(409 : 424)

Elongation %
10.5 : 11.0

(ASTM E1004)

Conductivity %IACS : 41.6 Min
(MS/M) : 24.1 Min

41.7 Max
24.2 Max

(ASTM E1251)

Chemistry:
Actual

SI
0.09

FE
0.18

CU
1.5

MN
0.01

MG
2.4

CR
0.20

ZN
5.6

TI
0.02

V
0.01

ZR
0.01

TOT

OTHER
0.04

CASTLE METALS-WIC

DATE REC'D

1-21-08

REC'D FROM

3800

APPROVED BY

4

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4119118

Lot: 429154A8 Cast 146

Drop 51

Ingot 1

(ASTM E8/B557)

Tensile: Temper
T7351

Dir / # Tests
LT / 2 (Min:Max)

Ultimate KSI (MPA)
71.7 : 71.8
(494 : 495)

Yield KSI (MPA)
60.0 : 60.0
(414 : 414)

Elongation %
11.7 : 12.0

(ASTM E1004)

Conductivity %IACS :
(MS/M) :

42.3 Min
24.5 Min

42.5 Max
24.7 Max

(ASTM E1251)

Chemistry:
Actual

SI
0.07

FE
0.16

CU
1.4

MN
0.01

MG
2.5

CR
0.23

ZN
5.8

TI
0.02

V
0.01

ZR
0.01

TOT

OTHER
0.03

ALLOY LIMITS

Chemistry:
7075 MIN
MAX

SI
0.00
0.40

FE
0.00
0.50

CU
1.2
2.0

MN
0.00
0.30

MG
2.1
2.9

CR
0.18
0.28

ZN
5.1
6.1

TI
0.00
0.20

V
0.00
0.05

ZR
0.00
0.05

EACH
TOT

MAX
0.05
0.15

Aluminum Remainder

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

